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FILE 'HOME' ENTERED AT 10:16:47 ON 08 SEP 2005

=> file biosis caplus caba agricola

=> s plant and basement and (protease or proteinase)
L1           5 PLANT AND BASEMENT AND (PROTEASE OR PROTEINASE)

=> d ti 1-5

L1   ANSWER 1 OF 5  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
TI   Basement membrane degrading proteases as insect toxins and
     methods of use for same.

L1   ANSWER 2 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Basement membrane degrading proteases as insect toxins and
     methods of use for same

L1   ANSWER 3 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Compositions for inhibiting hypersensitivity

L1   ANSWER 4 OF 5  CABA COPYRIGHT 2005 CABI on STN
TI   Effects of a protease-expressing recombinant baculovirus on
     nontarget insect predators of Heliothis virescens.

L1   ANSWER 5 OF 5  CABA COPYRIGHT 2005 CABI on STN
TI   Ultrastructural changes to the midgut of the black field cricket
     (Teleogryllus commodus) following ingestion of potato protease
     inhibitor II.


=> d bib abs 3 4

L1   ANSWER 3 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2003:570760  CAPLUS
DN   139:122763
TI   Compositions for inhibiting hypersensitivity
IN   Badylak, Stephen Francis; Morris, Kenneth Robert
PA   Purdue Research Foundation, USA
SO   PCT Int. Appl., 36 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2003059284        A2    20030724    WO 2003-US650          20030109
     WO 2003059284        A3    20031231
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-347537P       P      20020111
AB   The present invention is directed to methods, compns., and devices for
     preventing or inhibiting undesired sensitization reactions of the skin or
     mucosa caused by a component of a transdermal or transmucosal drug
     delivery system.  A method is provided wherein a matrix composition is
     administered to intact skin or mucosa of a vertebrate in combination with
     a transdermal or transmucosal drug delivery system to inhibit
     sensitization of the skin or mucosa by a component of the delivery system.
     The invention is also directed to a pharmaceutical composition comprising the
     transdermal or transmucosal drug delivery system, an effective amount of a
     drug, and a sensitization inhibitory composition comprising a matrix composition,
     and to a delivery device for administration of such a composition  Urinary
     bladder submucosa was prepared from porcine urinary bladder from a local
     meat processing plant.  The excised urinary bladder was rinsed
     free of contents, and the superficial layers of the mucosa were removed by
     mech. delamination.  Urinary bladder powder was suspended in extraction buffers
     (25%) containing phenylmethyl sulfonyl fluoride, N-ethylmaleimide, and
     benzamidine (protease inhibitors) each at 1 mM and vigorously
     stirred for 24 h at 4°.  The extraction mixture was then centrifuged and
     the supernatant collected.

L1   ANSWER 4 OF 5  CABA COPYRIGHT 2005 CABI on STN
AN   2003:167969  CABA
DN   20033145320
TI   Effects of a protease-expressing recombinant baculovirus on
     nontarget insect predators of Heliothis virescens
AU   Boughton, A. J.; Obrycki, J. J.; Bonning, B. C.
CS   Department of Entomology, Iowa State University, 407 A Science II
     Building, Ames, IA 50011, USA. bbonning@iastate.edu
SO   Biological Control, (2003) Vol. 28, No. 1, pp. 101-110. 29 ref.
     Publisher: Academic Press. Meppel
     ISSN: 1049-9644
     DOI: 10.1016/S1049-9644(03)00031-8
CY   Netherlands Antilles
DT   Journal
LA   English
ED   Entered STN: 20031003
     Last Updated on STN: 20031003
AB   The baculovirus AcMLF9.ScathL expresses a basement
     membrane-degrading protease and represents a new class of
     recombinant baculovirus insecticides. Risk assessment studies were
     conducted according to the requirements of the US Environmental Protection
     Agency to investigate potential negative effects of consumption of
     Heliothis virescens larvae infected with AcMLF9.ScathL, on two common
     predators, the lacewing Chrysoperla carnea, and the ladybird beetle
     Coleomegilla maculata. Predators were reared on one of three feeding
     regimes consisting of H. virescens larvae that were uninfected or infected
     with AcMLF9.ScathL or AcMNPV C6. Control regimes consisted of Sitotroga
     cerealella eggs for C. carnea and Ostrinia nubilalis eggs and aphids for
     C. maculata. Survival of C. carnea fed Sitotroga eggs or
     AcMLF9.ScathL-infected H. virescens was significantly higher than for C.
     carnea fed H. virescens that were uninfected or infected with AcMNPV C6.
     There were no significant differences in development rates between C.
     carnea fed H. virescens infected with AcMNPV C6 or AcMLF9.ScathL.
     Baculoviruses ingested by C. carnea larvae remained viable within the
     digestive tract until adult emergence but had no detrimental effect on egg
     production. There was no evidence of adverse effects of AcMLF9.ScathL on
     C. maculata although this species exhibited low survival on diets composed
     exclusively of H. virescens. In choice tests, neither predator exhibited a
     preference between uninfected H. virescens and H. virescens infected with
     AcMNPV C6 or AcMLF9.ScathL. The data suggest that use of AcMLF9.ScathL in
     pest management would pose no greater risk to insect predators in the
     environment than use of the wild-type virus AcMNPV C6.


=> s plant and (collagenase or gelatinase or stroelysin or metalloproteinase or
metalloprotease)
L2          670 PLANT AND (COLLAGENASE OR GELATINASE OR STROELYSIN OR METALLOPRO
                TEINASE OR METALLOPROTEASE)

=> s plant and stromelysin
L3           17 PLANT AND STROMELYSIN

=> d ti 1-17
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L3   ANSWER 1 OF 17  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
TI   Inhibition of interleukin-1beta-stimulated collagenase and
     stromelysin expression in human tendon fibroblasts by
     epigallocatechin gallate ester.

L3   ANSWER 2 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Basement membrane degrading proteases as insect toxins and methods of use
     for same

L3   ANSWER 3 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Matrix metalloproteinase inhibitors containing plants (extracts)

L3   ANSWER 4 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   MMP inhibitors and skin preparations containing plant (extracts)

L3   ANSWER 5 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Cosmetics containing plant-derived steroids which promote

L3   ANSWER 6 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Method for inhibiting the expression of a target gene

L3   ANSWER 7 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Targeted inhibition of gene expression with double-stranded RNA with
     single-stranded ends

L3   ANSWER 8 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Methods of determining individual hypersensitivity to a pharmaceutical
     agent from gene expression profile

L3   ANSWER 9 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Tripterygium wilfordii Hook F extract suppresses proinflammatory
     cytokine-induced expression of matrix metalloproteinase genes in articular
     chondrocytes by inhibiting activating protein-1 and nuclear
     factor-κB activities

L3   ANSWER 10 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Compositions and methods for cancer treatment by selectively inhibiting
     VEGF

L3   ANSWER 11 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Matrix metalloprotease inhibitors from plants for preparation of skin
     cosmetics

L3   ANSWER 12 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Ricin precursors cleavable by disease-specific proteinases for treatment
     of cancer, viral or parasitic infections

L3   ANSWER 13 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   A multiplex competitive PCR method for quantitation of multiple nucleic
     acid sequences in a mixture

L3   ANSWER 14 OF 17  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   A metalloproteinase inhibitor from Doliocarpus verruculosus

L3   ANSWER 15 OF 17  CABA COPYRIGHT 2005 CABI on STN
TI   Use of proteases to improve the insecticidal activity of baculoviruses.

L3   ANSWER 16 OF 17  CABA COPYRIGHT 2005 CABI on STN
TI   A metalloproteinase inhibitor from Doliocarpus verruculosus.

L3   ANSWER 17 OF 17  AGRICOLA  Compiled and distributed by the National
     Agricultural Library of the Department of Agriculture of the United States
     of America.  It contains copyrighted materials.  All rights reserved.
     (2005) on STN
TI   A metalloproteinase inhibitor from Doliocarpus verruculosus.
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=> d bib abs 15

L3   ANSWER 15 OF 17  CABA COPYRIGHT 2005 CABI on STN
AN   2001:87085  CABA
DN   20013051150
TI   Use of proteases to improve the insecticidal activity of baculoviruses
AU   Harrison, R. L.; Bonning, B. C.
CS   Department of Entomology and Interdepartmental Genetics Program, Iowa
     State University, Ames, IA 50011, USA.
SO   Biological Control, (2001) Vol. 20, No. 3, pp. 199-209. 41 ref.
     Publisher: Academic Press. Orlando
     ISSN: 1049-9644
CY   United States
DT   Journal
LA   English
ED   Entered STN: 20010906
     Last Updated on STN: 20010906
AB   Recombinant Autographa californica multicapsid nucleopolyhedroviruses
     (AcMNPV) that express proteases known to digest basement membrane (BM)
     proteins of lepidopterous larvae were developed. Viruses that express
     stromelysin-1, gelatinase A or cathepsin L were produced and
     tested for reduced survival time of AcMNPV-infected Heliothis virescens.
     Of the three proteases tested, only cathepsin L significantly reduced
     survival time and feeding damage caused by infected H. virescens larvae.


=> s l2 and insect?
L4          51 L2 AND INSECT?

=> duplicate remove l4

L5            43 DUPLICATE REMOVE L4 (8 DUPLICATES REMOVED)

=> d ti 1-43

L5   ANSWER 1 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Polynucleotides and polypeptides that are overexpressed in lung and other
     cancers, and diagnostic and therapeutic uses thereof

L5   ANSWER 2 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Comparative analysis of selected genes from Diachasmimorpha longicaudata
     entomopoxvirus and other poxviruses
     Special issue: Non-poly-DNA viruses, their parasitic wasps and hosts.

L5   ANSWER 3 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Effects of plant protease inhibitors, oryzacystatin I and
     soybean Bowman-Birk inhibitor, on the aphid Macrosiphum euphorbiae
     (Homoptera, Aphididae) and its parasitoid Aphelinus abdominalis
     (Hymenoptera, Aphelinidae)

L5   ANSWER 4 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Proteases from environmental sources, nucleic acids encoding them and
     methods for making and using them

L5   ANSWER 5 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Basement membrane degrading proteases as insect toxins and
     methods of use for same

L5   ANSWER 6 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Modeling the structure of the Type I peritrophic matrix: characterization
     of a Mamestra configurata intestinal mucin and a novel peritrophin
     containing 19 chitin binding domains.

L5   ANSWER 7 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Venom of Euplectrus separatae causes hyperlipidemia by lysis of host fat
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     body cells.

L5   ANSWER 8 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Colorado potato beetles show differential digestive compensatory responses
     to host plants expressing distinct sets of defense proteins

L5   ANSWER 9 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   ADAM metalloproteinase and Interactor nucleotide and amino acid
     sequences relating to respiratory diseases and obesity

L5   ANSWER 10 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Identification, sequence, and pharmaceutical and diagnostic use of human
     metalloproteinase ADAM homolog gene 216 relating to asthma,
     obesity, and inflammatory bowel disease

L5   ANSWER 11 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Production of recombinant heterologous proteins by incorporation into
     plant oil bodies for efficient expression and purification

L5   ANSWER 12 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   The COP9 signalosome.

L5   ANSWER 13 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   Inhibitory effect of caffeic acid phenethyl ester on angiogenesis, tumor
     invasion, and metastasis.

L5   ANSWER 14 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Oryzacystatin I expressed in transgenic potato induces digestive
     compensation in an insect natural predator via its herbivorous
     prey feeding on the plant

L5   ANSWER 15 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   Molecular interactions between an insect predator and its
     herbivore prey on transgenic potato expressing a cysteine proteinase
     inhibitor from rice.

L5   ANSWER 16 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   EST analysis of genes expressed by the zygomycete pathogen Conidiobolus
     coronatus during growth on insect cuticle.

L5   ANSWER 17 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Genetic and biochemical characterization of PrtA, an RTX-like
     metalloprotease from Photorhabdus.

L5   ANSWER 18 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   Biological activity of tropolone.

L5   ANSWER 19 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   Advances in insect virus synergists.

L5   ANSWER 20 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Ordered arrays of cells carrying reporter constructs to assay for
     effectors of gene expression from different promoters and their uses

L5   ANSWER 21 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Biopanning and rapid analysis of selective interactive ligands (BRASIL)

L5   ANSWER 22 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Insect inhibitors of metalloproteinases.

L5   ANSWER 23 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Bacterial infection of a model insect: Photorhabdus luminescens
     and Manduca sexta.

L5   ANSWER 24 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Methods of determining individual hypersensitivity to a pharmaceutical
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     agent from gene expression profile

L5   ANSWER 25 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Complexity in specificities and expression of Helicoverpa armigera gut
     proteinases explains polyphagous nature of the insect pest

L5   ANSWER 26 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Physiology of insect cells cultured in a new serum-free medium

L5   ANSWER 27 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   Identification of metalloprotease gene families in sugarcane.

L5   ANSWER 28 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Use of proteases to improve the insecticidal activity of
     baculoviruses.

L5   ANSWER 29 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Physiological activities and prospects of oil of Aomori hiba

L5   ANSWER 30 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN DUPLICATE 5
TI   Protease inhibitory plant defensive proteins

L5   ANSWER 31 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Contortrostatin and methods for its use in preventing metastasis and other
     conditions

L5   ANSWER 32 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Novel methods for in vivo identification of enzyme inhibitors from random
     peptide-chymotrypsin inhibitor 2A (CI-2A) fusion library and their use in
     drug screening

L5   ANSWER 33 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Why is the scarab specific Bacillus thuringiensis ssp. japonensis strain
     Buibui inefficient against Melolontha melolontha?.

L5   ANSWER 34 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Extracellular hydrolytic enzymes in the fungal genus Verticillium:
     adaptations for pathogenesis

L5   ANSWER 35 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   Characterisation of the mid-gut digestive proteinase activity of the
     two-spot ladybird (Adalia bipunctata L.) and its sensitivity to proteinase
     inhibitors.

L5   ANSWER 36 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Recombinant preparation of high-value peptides by using oil-body proteins
     as carriers in transgenic plants

L5   ANSWER 37 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Plant oleosin cDNA sequences and oil body proteins as carriers
     of high value recombinant proteins

L5   ANSWER 38 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   Purification and characterization of a digestive cathepsin D proteinase
     isolated from Tribolium castaneum larvae (Herbst).

L5   ANSWER 39 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Drug-loaded pollen grains with an outer coating for pulsed delivery

L5   ANSWER 40 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   An aminopeptidase from the moulting fluid of the tobacco hornworm, Manduca
     sexta.

L5   ANSWER 41 OF 43  CABA COPYRIGHT 2005 CABI on STN
TI   Biotechnology in crop protection.
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L5   ANSWER 42 OF 43  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on
TI   PROTEINASES AND AMYLASES OF LARVAL MIDGUT OF ZABROTES-SUBFASCIATUS REARED
     ON COWPEA VIGNA-UNGUICULATA SEEDS.

L5   ANSWER 43 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
TI   Process for controlling plant pests using recombinant proteinase
     inhibitor genes


=> d bib abs 41 36 28 17 8

L5   ANSWER 41 OF 43  CABA COPYRIGHT 2005 CABI on STN
AN   92:124362  CABA
DN   19922324910
TI   Biotechnology in crop protection
AU   Waalwijk, C.; Dekkers, J. J. [EDITOR]; Plas, H. C. van der [EDITOR];
     Vuijk, D. H. [EDITOR]
CS   Research Institute for Plant Protection, PO Box 9060, 6700 GW Wageningen,
     Netherlands.
SO   Agricultural biotechnology in focus in the Netherlands, (1990) pp. 49-73.
     36 ref.
     Publisher: Pudoc. Wageningen
     ISBN: 90-220-1008-2
CY   Netherlands Antilles
DT   Miscellaneous
LA   English
ED   Entered STN: 19941101
     Last Updated on STN: 19941101
AB   Three strategies for control of pests and diseases using biotechnology are
     dealt with. The first one concerns study of soil bacteria as local
     producers of compounds antagonistic to soil-borne pests. Fungi with
     different mechanisms of infection have been selected for analysis of
     antagonistic activity towards Meloidogyne hapla. A bio-assay was developed
     which allowed analysis of changes in egg hatching or the mobility of
     second stage juveniles. Light and scanning microscopy were used to study
     the infection process. Fungi from the Dactylaria-complex affected juvenile
     mobility within 15 minutes and cuticle deformation were observed within 72
     hours. Extracellular enzymes that might play a role in the antagonistic
     action of the fungi were analysed. All twenty fungi tested produced
     collagenase and two also showed chitinase activity. Soil bacteria
     have been isolated and selected with emphasis on applicability, safety and
     viscidity. Association with roots and active colonization of roots was
     tested with a selected group of isolates, representing all major taxonomic
     groups. Electroporation enabled transformation of recalcitrant organisms.
     A plasmid vector was developed which allowed introduction of heterologous
     DNA into the chromosome of the accepting bacterium by homologous
     recombination, thereby reducing the risk of horizontal spread after
     introduction into the soil. The second strategy is production of
     recombinant baculoviruses in bioreactors. Baculovirus recombinants were
     isolated expressing a bacterial toxin and and insect hormone.
     These recombinants induced increased morbidity and mortality resulting in
     early cessation of feeding. During a reactor-run defective-interfering
     virus particles were detected which lacked 40% of the genome, including
     the polyhedrin gene. These defective particles interfere with the
     replication of the original wild-type virus and are probably the major
     cause of the decrease in productivity observed after four weeks of
     continuous baculovirus production. The third strategy is obtaining
     transgenic plants resistant to viral infections. The nucleotide sequence
     of the genomic RNA of potato leaf roll virus was determined and its
     genomic organization deduced.

L5   ANSWER 36 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   1997:527665  CAPLUS
DN   127:186616
TI   Recombinant preparation of high-value peptides by using oil-body proteins
     as carriers in transgenic plants
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IN    Moloney, Maurice
PA    Sembiosys Genetics Inc., Can.
SO    U.S., 37 pp., Cont.-in-part of U.S. Ser. No. 142,418, abandoned.
      CODEN: USXXAM
DT    Patent
LA    English
FAN.CNT 9
      PATENT NO.          KIND   DATE        APPLICATION NO.       DATE
      ---------------     ----   --------    --------------------  --------
PI    US 5650554           A     19970722    US 1994-366783        19941230
      CA 2208751           AA    19960711    CA 1995-2208751       19951221
      WO 9621029           A1    19960711    WO 1995-CA724         19951221
          W:  AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
              GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
              MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
              TM, TT
          RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
              IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
              NE, SN, TD, TG
      AU 9642950           A1    19960724    AU 1996-42950         19951221
      AU 709141            B2    19990819
      ZA 9510999           A     19960713    ZA 1995-10999         19951228
      BR 9600006           A     19980121    BR 1996-6             19960102
      US 5948682           A     19990907    US 1997-846021        19970425
      US 6288304           B1    20010911    US 1998-210843        19981218
      US 2002100073        A1    20020725    US 2001-887569        20010625
      US 2003126631        A1    20030703    US 2001-893525        20010629
      US 6753167           B2    20040622
      US 2002088025        A1    20020704    US 2001-897425        20010703
      US 6750046           B2    20040615
      US 2003177537        A1    20030918    US 2002-324131        20021220
      US 2004205844        A1    20041014    US 2004-763380        20040126
      JP 2005013236        A2    20050120    JP 2004-266023        20040913
PRAI  US 1991-659835       B2    19910222
      US 1993-142418       B2    19931116
      JP 1992-507924       A3    19920415
      US 1994-366783       A     19941230
      WO 1995-CA724        W     19951221
      US 1997-846021       A2    19970425
      US 1998-210843       A3    19981218
      US 2001-893525       A2    20010629
AB    Methods and compns. for expressing a heterologous peptide/polypeptide of
      interest in a seed cell as a fusion protein with an oil body protein
      (oleosin) are described.  The fusion protein may be isolated by methods
      such as affinity chromatog. using antibodies to the oil body protein.  The
      Arabidopsis thaliana 1.8 kb oleosin gene was cloned and sequenced.  An
      expression cassette encoding interleukin-1β fused to this oleosin was
      prepared  Transgenic tobacco and Brassica napus plants containing this
      expression cassette were shown by immunochem. anal. of electrophoretically
      separated tobacco proteins to contain the expected fusion protein.  Also
      disclosed were the preparation of various recombinant proteins of non-
      plant origin by expression of their oleosin/protein-encoding
      chimeric gene in transgenic B. napus.  Insecticidal protein may
      also be expressed using this method in transgenic plants for protection.
      Finally, the persistent association of oil body proteins with the oil body can
      be further utilized to develop a biol. means to create novel immobilized
      enzymes useful for bioconversion of substrates.  Cloning of cDNA for
      oleosin from B. napus was also shown.

L5    ANSWER 28 OF 43  CABA COPYRIGHT 2005 CABI on STN
AN    2001:87085  CABA
DN    20013051150
TI    Use of proteases to improve the insecticidal activity of
      baculoviruses
AU    Harrison, R. L.; Bonning, B. C.
CS    Department of Entomology and Interdepartmental Genetics Program, Iowa
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     State University, Ames, IA 50011, USA.
SO   Biological Control, (2001) Vol. 20, No. 3, pp. 199-209. 41 ref.
     Publisher: Academic Press. Orlando
     ISSN: 1049-9644
CY   United States
DT   Journal
LA   English
ED   Entered STN: 20010906
     Last Updated on STN: 20010906
AB   Recombinant Autographa californica multicapsid nucleopolyhedroviruses
     (AcMNPV) that express proteases known to digest basement membrane (BM)
     proteins of lepidopterous larvae were developed. Viruses that express
     stromelysin-1, gelatinase A or cathepsin L were produced and
     tested for reduced survival time of AcMNPV-infected Heliothis virescens.
     Of the three proteases tested, only cathepsin L significantly reduced
     survival time and feeding damage caused by infected H. virescens larvae.

L5   ANSWER 17 OF 43  CABA COPYRIGHT 2005 CABI on STN
AN   2003:129335  CABA
DN   20033100832
TI   Genetic and biochemical characterization of PrtA, an RTX-like
     metalloprotease from Photorhabdus
AU   Bowen, D. J.; Rocheleau, T. A.; Grutzmacher, C. K.; Meslet, L.; Valens,
     M.; Marble, D.; Dowling, A.; ffrench-Constant, R.; Blight, M. A.
CS   Department of Entomology, University of Wisconsin-Madison, Madison, USA.
     mark.blight@mac-mail.igmors.u-psud.fr
SO   Microbiology (Reading), (2003) Vol. 149, No. 6, pp. 1581-1591. 43 ref.
     Publisher: Society for General Microbiology. Reading
     ISSN: 1350-0872
CY   United Kingdom
DT   Journal
LA   English
ED   Entered STN: 20030812
     Last Updated on STN: 20030812
AB   Proteinases play a key role in the interaction between pathogens and their
     hosts. The bacterial entomopathogen Photorhabdus lives in symbiosis with
     nematodes that invade insects. Following entry into the
     insect, the bacteria are released from the nematode gut into the
     open blood system of the insect. Here they secrete factors which
     kill the host and also convert the host tissues into food for the
     replicating bacteria and nematodes. One of the secreted proteins is PrtA,
     which is shown here to be a repeats-in-toxin (RTX) alkaline zinc
     metalloproteinase. PrtA has high affinity for artificial
     substrates such as casein and gelatin and can be inhibited by zinc
     metalloproteinase inhibitors. The metalloproteinase also
     shows a calcium- and temperature-dependent autolysis. The prtA gene
     carries the characteristic RTX repeated motifs and predicts high
     similarity to proteinases from Erwinia chrysanthemi, Pseudomonas
     aeruginosa and Serratia marcescens. The prtA gene resides in a locus
     encoding both the proteinase ABC transporter (prtBCD) and an intervening
     ORF encoding a proteinase inhibitor (inh). PrtA activity is detectable 24
     h after artificial bacterial infection of an insect, suggesting
     that the proteinase may play a key role in degrading insect
     tissues rather than in overcoming the insect immune system.
     Purified PrtA also shows cytotoxicity to mammalian cell cultures,
     supporting its proposed role in bioconversion of the insect
     cadaver into food for bacterial and nematode development.

L5   ANSWER 8 OF 43  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:216132  CAPLUS
DN   140:420764
TI   Colorado potato beetles show differential digestive compensatory responses
     to host plants expressing distinct sets of defense proteins
AU   Rivard, Daniel; Cloutier, Conrad; Michaud, Dominique
CS   Departement de Phytologie, Centre de recherche en horticulture, Universite
     Laval, Sainte-Foy, QC, G1K 7P4, Can.
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SO   Archives of Insect Biochemistry and Physiology (2004), 55(3), 114-123
     CODEN: AIBPEA; ISSN: 0739-4462
PB   Wiley-Liss, Inc.
DT   Journal
LA   English
AB   Herbivorous insects fed plants expressing proteinase inhibitors
     (PIs) compensate for the loss of digestive proteolytic functions by
     producing novel proteinases.  We assessed here whether such compensatory
     responses represent a general, non-specific adaptation to defense-related
     proteins in host plant tissues, or if distinct responses occur
     depending on the stress exerted on the plant.  As a model,
     growth, development, and digestive proteases of the Colorado potato beetle
     (Leptinotarsa decemlineata Say) were monitored after feeding larvae with
     plants pre-treated with either Me jasmonate or arachidonic acid, two
     compds. inducing different sets of defense genes in potato.  In brief,
     larvae fed plants treated with jasmonate or arachidonate were neg.
     affected compared to larvae fed non-treated plants, suggesting the potency
     of both mols. to induce partial resistance to potato beetles in potato.
     On the other hand, larvae fed treated plants partially compensated for the
     presence of defense-related proteins by adapting their digestive
     proteolytic system, both quant. and qual.  These compensatory processes
     varied depending on the treatment, the larvae fed arachidonate-treated
     plants showing the most dramatic response.  Compensation to jasmonate and
     arachidonate was also influenced by a cysteine PI from rice expressed in
     the plant, pointing out the possible indirect effects of
     recombinant defense proteins on naturally-occurring plant-
     insect interactions.  These observations, while showing the
     potential of jasmonate and arachidonate as inducers of partial resistance
     to the potato beetle in potato, also suggest that digestive compensation
     in herbivorous insects is determined, at least in part, by
     defense-related compds. found in the plant in response to
     different stress stimuli or as a result of ectopic expression in
     transgenic plants.
RE.CNT  34    THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


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